

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Peter Ramanauskas, RCRA Corrective Action Project Manager United States Environmental Protection Agency, Region 5 77 Jackson Boulevard (LU-9J) Chicago, IL 60604-3507

August 3, 2010 PJ/DW/PSA

Subject:

Corrective Measures Implementation (CMI) Report Update

Waste Water Pump Station No. 2 Surface Impoundment (IA-1) and Corrective Action Completion Report and Quarterly Progress Report for

Locomotive Fueling Station

ArcelorMittal Burns Harbor, LLC, IND003913423

Dear Mr. Ramanauskas,

Per your request during our conversation on July 16th, enclosed are an updated CMI Report for IA-1, a Corrective Action Completion Report for Diesel Impacted Soil (dated July 31, 2008), and a Quarterly Progress Report for the Diesel Fuel Product Recovery system (dated August 3, 2010). These documents are being submitted in order to receive EPA agreement that no further action is warranted at the Wastewater Pump Station No. 2 Surface Impoundment and Locomotive Diesel Fueling Station areas.

The updated IA1 Report provides documentation that the groundwater monitoring has met the "Criteria for Termination" specified in Section 5 of the EPA-approved CMI Workplan. Your written concurrence that we can terminate future monitoring is requested.

The Corrective Action Completion Report for Diesel Impacted Soil and Quarterly Progress Report provide documentation that an appropriate and complete response to the discovery of the historical release was implemented.

These reports conclude all of the corrective measures requirements for the Burns Harbor facility. Therefore, it is also requested that Burns Harbor receive your written concurrence that the requirement to maintain financial assurance for corrective action is no longer needed.

If there are any questions, comments or concerns regarding this matter, please contact me at (219) 787-4643 Sincerely,

Teri Kirk

Environmental Engineer

Cc:

D. P. Bley

August 3, 2010 Project No. 2387353-01

IA-1 SEMIANNUAL REPORT 2010 AND REQUEST FOR APPROVAL TO TERMINATE GROUNDWATER MONITORING

WASTEWATER PUMP STATION NO. 2 SURFACE IMPOUNDMENT (N.I.16)

Prepared For:

ArcelorMittal Burns Harbor, LLC 250 West U.S. Highway 12 Burns Harbor, IN 46304-9745

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1.0 INTRODUCTION

1.1 Background Information

Weaver Boos Consultants, LLC (Weaver Boos) completed this report to present the results of the on-going groundwater monitoring program through the second quarter of 2010 at the Wastewater Pump Station (WWPS) No. 2 surface impoundment, Investigation Area 1 (IA-1). The IA-1 surface impoundment is located east-southeast of the No. 2 WWPS at the ArcelorMittal Burns Harbor, LLC (ArcelorMittal) Facility located in Burns Harbor, Indiana.

The IA-1 surface impoundment is a former drying bed that was used to dry nonhazardous sludge and coke oven gas condensate in the early 1970s. The area covers approximately 13,000 square feet. In 1986, the Bethlehem Steel Corporation, which owned the facility at the time, excavated the material that remained in the drying bed, nearly reaching the water table, and disposed of this material off site. During the Phase 1 RFI, the soil at the base of the impoundment was sampled and analyzed. Results confirmed that the 1986 excavation had successfully removed the source material and that IA-1 is not a continuing source of release to the groundwater. However, groundwater sampling and analyses conducted during both the Phase 1 and Phase 2 RFI indicated that benzene and toluene are present in the groundwater immediately downgradient of the impoundment. Benzene and toluene are typical constituents of coke oven gas condensate and other coke byproducts. Groundwater elevations measured during the Phase 1 and Phase 2 RFI consistently indicated groundwater flow towards the south-southwest, in the direction of the Stormwater/Non-Contact Cooling Water (SW/NCCW) Discharge Channel. Additionally, concentrations of benzene in groundwater immediately downgradient of the surface impoundment were found to exhibit a positive correlation with changes in groundwater elevation in monitoring well IA1-OW-1, particularly between 2001 and 2003.

Based on these results, it was concluded that the groundwater fluctuation zone at IA-1 contains residual material that is causing localized concentrations of benzene in the groundwater. On April 3, 2003, representatives of the EPA visited IA-1 to identify practical additional sampling steps. In a letter dated April 10, 2003, EPA requested "further groundwater sampling to determine the source and extent (as far as feasible) of the contamination on the south end of the impoundment area". In response to EPA's request, ArcelorMittal prepared a sampling and analysis plan to further assess the groundwater that included the installation of two new monitoring wells (IA1-OW-4 and IA1-OW-5) south of IA1 and quarterly monitoring of groundwater for benzene and toluene. Weaver Boos implemented the quarterly groundwater

monitoring and prepared this report describing the results obtained between 2001 and the second quarter of 2010.

1.2 Purpose and Objectives

The purpose, scope of work, and objectives for the annual sampling activities described in this report are specified in the October 31, 2006 Corrective Measures Implementation (CMI) Work Plan for the IA-1 Surface Impoundment that was approved by EPA on November 14, 2006. The CMI Work Plan specified the following activities:

- Collection and analyses of groundwater samples from three monitoring wells (IA1-OW-1, IA1-OW-4, IA1-OW-5);
- Measurement of groundwater levels and calculation of groundwater elevations at all of the groundwater sample locations for groundwater flow direction verification; and,
- Assessment of the results in light of criteria for termination of monitoring.

Following receipt of the analytical data, the results were compared with screening levels and plotted with the previous Phase 1 and Phase 2 RFI data for trend analysis in IA1-OW-1, IA1-OW-4, IA1-OW-5. The objective of the evaluation of groundwater data is to assess whether additional groundwater monitoring or remedial measures are appropriate for conditions at IA-1.

This report considers data collected beginning as early as 2001, and with the completion of the 3 ½ years of groundwater monitoring during 2007, 2008, 2009, and the first half of 2010, assesses compliance with the approved termination criteria. As further discussed in **Section 4.0**, it is clear that the objectives of the CMI Work Plan, including termination criteria, have been met. Weaver Boos and ArcelorMittal therefore request EPA's review, concurrence with these findings, and approval to cease the on-going groundwater monitoring program at IA-1.



2.0 SITE ACTIVITIES

2.1 Groundwater Level Measurements

Weaver Boos measured water levels during each sampling event on February 15, 2010, and June 15, 2010 to assess groundwater flow directions. The monitoring wells included in the sampling plan are IA1-OW-1, IA1-OW-4, and IA1-OW-5. These monitoring wells are located as shown in **Figures 1 through 3**. Water levels were measured using an electric tape accurate to 0.01 feet. The water levels were recorded on Field Survey Forms as provided in **Appendix A**. Water level measurements are summarized as shown in **Table 1**. Using wellhead elevations provided by ArcelorMittal, groundwater elevations were computed for each measuring point as further indicated in **Table 1**.

2.2 Groundwater Sampling

Groundwater samples were collected from monitoring wells IA1-OW-1, IA1-OW-4, and IA1-OW-5 on February 15, 2010 and on June 15, 2010. The groundwater samples were acquired in accordance with the CMI Work Plan dated October 31, 2006. The specific procedures utilized for groundwater sampling are described below.

Prior to sampling, both the depth to groundwater and the total depth of the monitoring wells were measured using an electric tape. These data were recorded and the volume of water contained in the well casing was computed for each well. Three well volumes were then purged using disposable polyethylene bailers. Following the purging of three well volumes from each well, a sample and duplicate sample was collected. Groundwater sampling information was recorded on Field Survey Report forms, which are provided in **Appendix A**.

Groundwater samples for quantitative analysis were gently dispensed into their respective containers using the bottom emptying device packaged with each bailer. All samples were containerized in triplicate 40-milliliter vials that were pre-preserved by the manufacturer with concentrated hydrochloric acid. ArcelorMittal's analytical contractor, Microbac Laboratory (Microbac) of Merrillville, Indiana, provided sample containers utilized for this effort. The samples were sealed, labeled, placed on ice, documented with a chain-of-custody form, and hand delivered by Weaver Boos to the laboratory.

2.3 Field and Analytical QA/QC

During each of the sampling events, QA/QC samples included field duplicates for each monitoring well sample, one field blank, and the transportation and analysis of one trip blank.

The field duplicates were labeled IA1-OW-1-Duplicate, IA1-OW-4-Duplicate, and IA1-OW-5-Duplicate. The duplicate samples were collected concurrently with the primary groundwater samples collected at each of these locations. The field blanks were collected by dispensing DI water supplied by Microbac from an unused polyethylene bailer into empty sample vials as previously described. The trip blank was prepared and sealed by the laboratory and accompanied the sampling containers and samples beginning with their delivery to Weaver Boos and ending with their return to the laboratory.

Groundwater samples were analyzed for benzene in accordance with SW-846 Method 8260B. Microbac provided the required analytical services. The resulting analytical reports are provided in **Appendix B**.

3.0 RESULTS

3.1 Groundwater Flow Direction

As shown in **Figures 2, 3, and summarized in Table 1**, the groundwater flow direction beneath IA-1 during 2010 was towards the south-southwest. Little or no variation in groundwater flow direction is indicated between the quarterly sampling events completed in 2010. Additionally, the quarterly groundwater flow direction remains essentially unchanged from 2007, 2008, and 2009.

3.2 Groundwater Concentrations

The average of the sample and duplicate analytical results for the monitoring well groundwater samples are summarized in **Table 2**. The highest concentrations of benzene were found at IA1-OW-1, which is immediately downgradient of the surface impoundment. The most recent sampling event occurring on June 15, 2010 indicated benzene at 41,500 μ g/L. The benzene concentrations attenuate rapidly over only a short distance. In monitoring wells IA1-OW-4 and IA1-OW-5, which are located approximately 100 feet downgradient from IA1-OW-1, benzene concentrations were either not detected or were detected at concentrations less than the site-specific screening level of 52 μ g/L. The observed attenuation of 2 to 3 orders of magnitude over a distance of just 100 feet is consistent with the occurrence of natural attenuation and a plume that is either stable or shrinking.

The time trend for benzene in monitoring well IA1-OW-1 is paired together with groundwater elevation in **Figure 4**. Time trends between 2001 and 2003 suggest direct correlation between benzene concentration and water level. After 2003 the water levels generally increased by an average of approximately 1.75 feet, and remained at the resulting elevated level averaging about 597 feet above mean sea level (msl) between 2007 and 2010. The benzene concentrations appeared to generally increase with the rise in water level after 2003, but the direct correlation between concentration and water level appears to have ended. The benzene concentrations measured in IA1-OW-1 during 2007, 2008, 2009, and 2010 now reveal an overall downward trend regardless of fluctuation of the elevated groundwater level as shown on **Figure 4**.

Time trend results for monitoring well IA1-OW-4 are plotted in **Figure 5**. No correlation between concentration and water level is apparent in this well, primarily because the concentrations are all low. The benzene concentration in well IA1-OW-4 has remained less than the industrial RISC default closure level (52 μ g/L) for all 14 consecutive quarters during 2007,



2008, 2009, and 2010. Moreover, the benzene concentration has remained below the residential RISC default closure level (5 μ g/L) for the last eight consecutive quarters.

Time trend results for monitoring well IA1-OW-5 are plotted in **Figure 6**. Except during the first two quarters, no correlation between concentration and water level is apparent in this well, primarily because the concentrations are all low. Additionally, the benzene concentrations measured in monitoring well IA1-OW-5 reveal a general downward trend for the last 14 quarters as shown on **Figure 6**. Benzene concentrations measured in IA1-OW-5 have remained less than the industrial RISC default closure level (52 µg/L) during the last seven consecutive quarters.

3.3 QA/QC Results

Duplicate sample results reported in **Appendix B** show primary and duplicate groundwater concentrations that are nearly equal, indicating good sampling and analytical precision. Results for field blanks showed no detectable concentrations during the 2010 sampling events. Results for the trip blank during February 2010 also showed no detectable concentration. Results for the June 2010 trip blank indicated benzene at $25 \mu g/L$, possibly suggesting that cross contamination occurred during transportation or analysis. The consequence of this result is likely to be an upward bias in the lesser concentrated site samples collected during June 2010. Except for "b" flags denoting the detection of benzene in the associated method blank for the samples collected from OW-5 during February 2010, Microbac reported their results without qualification. The likely consequence of this flag is a slight upward bias in the benzene concentrations reported for the OW-5 samples during February 2010. Because the only upward bias suggested by QA/QC results is upward, Weaver Boos considers the site data obtained during both sampling events to be useable for their stated purpose.

3.4 Criteria for Termination

The approved CMI Work Plan states that groundwater monitoring may terminate at IA-1 when one of the following events has occurred:

- Three years from the anniversary date of the first sample event if plume stability is demonstrated using the Mann-Kendall trend test described in Appendix 3 of IDEM's RISC Technical Resource Document, or
- If an increasing trend in plume stability is shown, semiannual testing of the two new downgradient wells [IA1-OW-4 and IA1-OW-5] shows benzene concentrations equal to or less than the industrial RISC default closure level (52 μg/L) over two consecutive sampling events.



Results obtained during 2007, 2008, 2009, and 2010 are evaluated according to these criteria in the following subsections of this report. Mann-Kendall trend testing is discussed first. Concentrations are then compared with relevant numerical standards.

3.4.1 Mann-Kendall Trend Testing

The first termination criterion relies on the non-parametric Mann-Kendall statistical procedure to evaluate the benzene time trends. The Mann-Kendall test requires no assumptions as to the statistical distribution of the data. The Mann-Kendall statistic (S) measures the trend in the data. Positive values indicate an increase in concentrations over time, whereas negative values indicate a decrease in concentrations over time. The strength of the trend is proportional to the magnitude of the Mann-Kendall statistic. The confidence on the Mann-Kendall statistic can be measured by assessing the S result along with the number of samples, n, to find the confidence in the trend by using a normal approximation for larger data sets (i.e., greater than 10 measurements).

The data collected from monitoring wells at IA-1 are evaluated using the Mann-Kendall trend test as explained in Appendix 3 of IDEM's RISC Technical Resource Document. This evaluation was completed using a Microsoft[®] Excel spreadsheet specifically developed by Weaver Boos to manage 14 data points. Using the data from IA-1, our spreadsheet was checked and verified against the more general Excel spreadsheet available for download at IDEM's website: http://www.in.gov/idem/4213.htm. Our spreadsheet yielded the same results in cases where the datasets were not dominated by non-detect results (i.e., less than 5.0 μ g/L). The IDEM's spreadsheet specifically omits the capability of managing 14-point datasets containing more than 6 equal values (such as non-detect), whereas ours is not similarly limited. Our spreadsheet also expresses the confidence on the Mann-Kendall statistic as a percent.

The spreadsheet and results for well IA1-OW-1 are provided on **Figure 7**. The data for this well indicate the highest benzene concentrations measured at IA-1 and include no non-detect values. The slope of the linear approximation illustrated in the graphical data plot is downward. The Mann-Kendall statistic (S) is -42, indicating a strong downward trend. The confidence on the downward trend is calculated at 97.4 percent, confirming the strength and statistical significance of the trend.

The spreadsheet and results for well IA1-OW-4 are provided on **Figure 8**. The data for this well are dominated by non-detect values (9 of 14 measurements are non-detect), rendering this well less suitable to trend analysis. Notwithstanding this limitation, $\frac{1}{2}$ of the detection limit (2.5 μ g/L) is substituted for the non-detect results and the adjusted values plotted. The linear approximation illustrated in the graph shows a small downward slope. The Mann-Kendall



statistic (S) is -5, indicating a weak downward trend. The confidence on the downward trend is 61.0 percent. However, given that all except one concentration (27 μ g/L on May 22, 2008) measured in this well were 5.5 μ g/L or less, the weakness of the trend is not relevant. The trend is weak simply because the great majority of the results are non-detect and almost no opportunity remains for improvement of groundwater quality at this well.

The spreadsheet and results for well IA1-OW-5 are provided on **Figure 9**. The data for this well include three non-detect values, for which we substituted ½ of the reporting limit. The slope of the linear approximation illustrated in the graph is downward. The Mann-Kendall statistic (S) is -15, indicating a downward trend. The confidence on the downward trend is calculated at 76.5 percent.

The first termination criterion for groundwater monitoring is clearly met. Results of the Mann-Kendall trend test indicate downward trends in all monitoring wells at IA-1. The strongest downward trend is demonstrated with 97.4 percent confidence in monitoring well IA1-OW-1 where the greatest concentrations of benzene have been historically detected. A moderately strong trend is indicated in well IA1-OW-5 where benzene concentrations have declined to less than the industrial RISC default closure level (52 μ g/L) during the last seven consecutive quarters. A weak downward trend is shown in well IA1-OW-4, but the trend is weak only because the concentrations are low. The benzene concentration in well IA1-OW-4 has remained less than the industrial RISC default closure level (52 μ g/L) throughout 2007, 2008, 2009, 2010, and less than the residential RISC default closure level (5 μ g/L) for the last eight consecutive quarters.

3.4.2 Comparison with Numerical Standards

The second termination criterion for groundwater monitoring is also clearly met. The second termination criterion considers benzene concentrations measured in well IA1-OW-4 and IA1-OW-5 as compared with the industrial RISC default closure level (52 μ g/L). The benzene concentration in well IA1-OW-4 has remained less than the industrial RISC default closure level during each of the 14 consecutive quarters in 2007, 2008, 2009, and 2010. Moreover, the benzene concentration at this well has remained below the residential RISC default closure level (5 μ g/L) for the last eight consecutive quarters. Benzene concentrations measured in IA1-OW-5 have remained less than the industrial RISC default closure level during the last seven consecutive quarters.



4.0 CONCLUSION

Groundwater monitoring for benzene continued during 2010 consistent with the currently approved CMI Work Plan. The concentrations of benzene in monitoring wells IA1-OW-4 and IA1-OW-5 continued to indicate attenuation of 2 to 3 orders of magnitude just 100 feet downgradient from the former impoundment. The rapid attenuation of benzene concentrations with distance indicates that natural attenuation has continued at IA1 during 2010. Considering data collected beginning as early as 2001, and with the completion of the 14 consecutive quarters of groundwater monitoring during 2007, 2008, 2009, and 2010, Weaver Boos concludes the following with regard to compliance with the approved termination criteria:

- Results of the Mann-Kendall trend test indicate downward trends in all monitoring wells at IA-1. The strongest downward trend is demonstrated with 97.4 percent confidence in monitoring well IA1-OW-1 where the greatest concentrations of benzene have been historically detected. A moderately strong downward trend is indicated in well IA1-OW-5 where benzene concentrations have declined to less than the industrial RISC default closure level (52 μg/L) during the last seven consecutive quarters. A weak downward trend is shown in well IA1-OW-4, but the trend is weak only because the concentrations are so low that no room remains for improvement in groundwater quality. The first termination criterion for groundwater monitoring is clearly met, providing sufficient basis to end the groundwater monitoring program at IA-1.
- The second termination criterion considers benzene concentrations measured in well IA1-OW-4 and IA1-OW-5 as compared with the industrial RISC default closure level. The benzene concentration in well IA1-OW-4 has remained less than the industrial RISC default closure level during each of the 14 consecutive quarters in 2007, 2008, 2009, and 2010. Moreover, the benzene concentration at this well has remained below the residential RISC default closure level (5 μg/L) for the last eight consecutive quarters. Benzene concentrations measured in IA1-OW-5 have remained less than the industrial RISC default closure level during the last seven consecutive quarters. Although unnecessary as a basis for terminating groundwater monitoring, the second termination criterion for groundwater monitoring is also clearly met because wells OW-4 and OW-5 have shown benzene concentrations less than the industrial RISC default closure level for more than the two required consecutive quarters.

Insomuch as all objectives of the Corrective Measures Implementation Work Plan have been achieved, Weaver Boos and ArcelorMittal request EPA's review and approval to cease the ongoing groundwater monitoring program at IA-1.



5.0 SIGNATURES

This semiannual report for IA1 was prepared by, or under the direct supervision of the undersigned environmental professional:

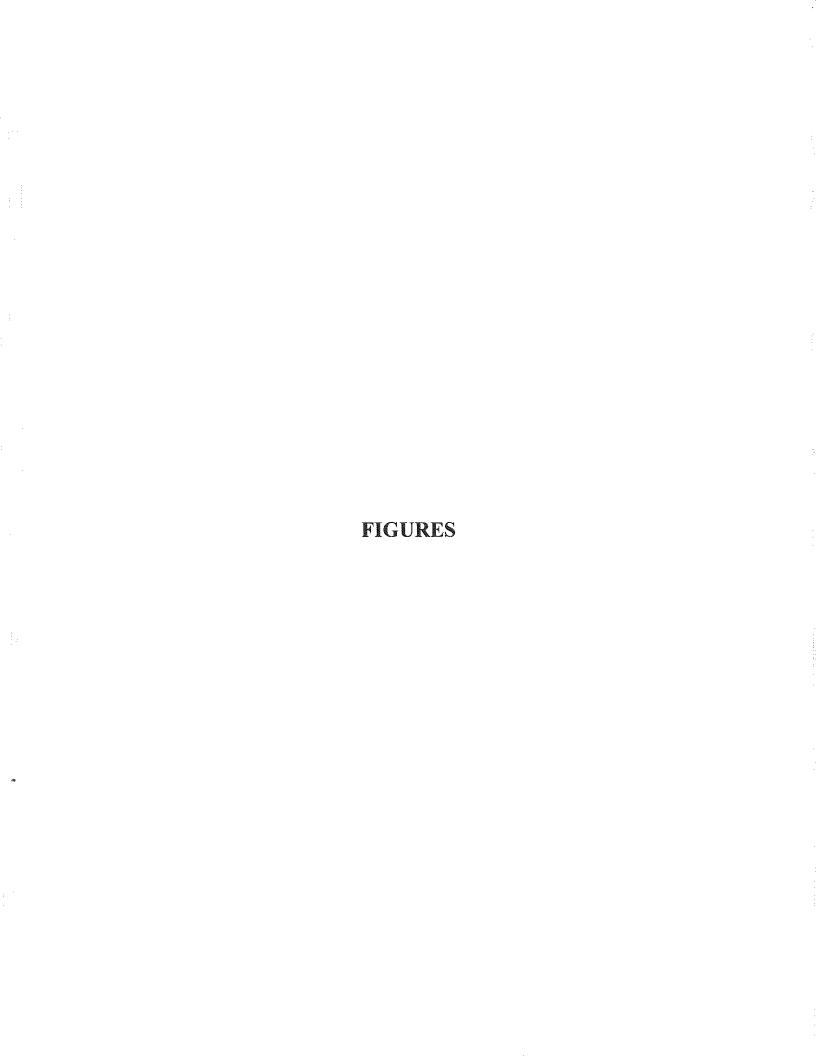
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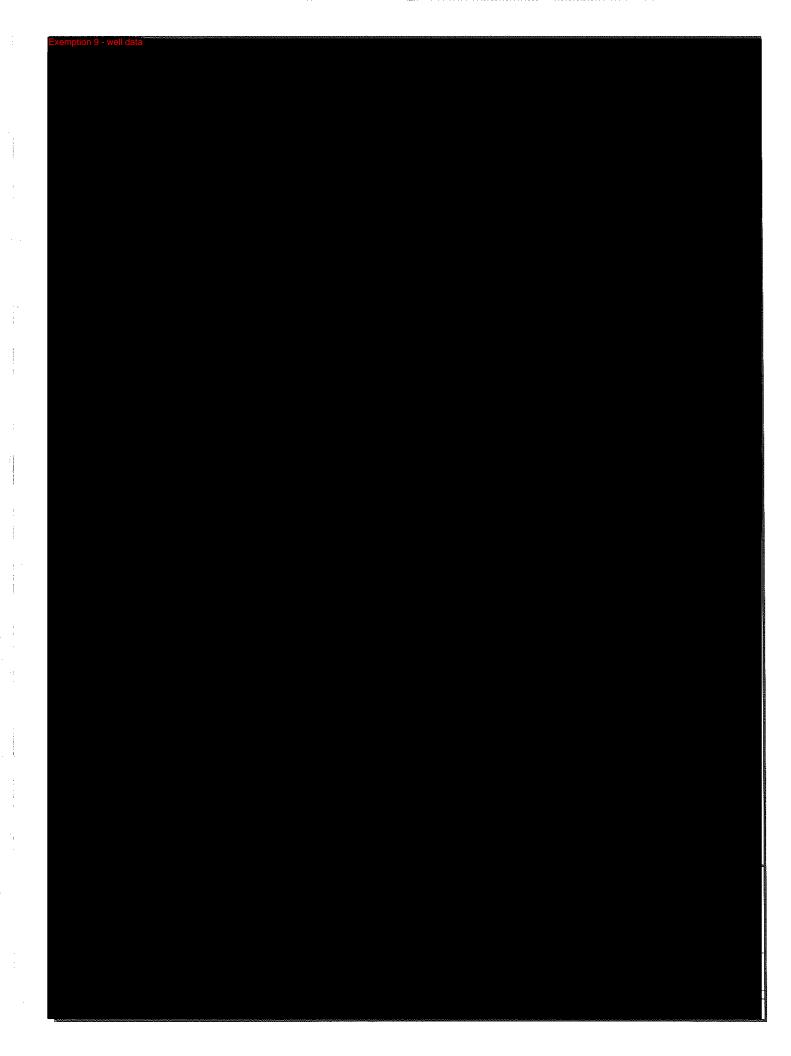
Steven M. Stanford, LPG Senior Project Manager

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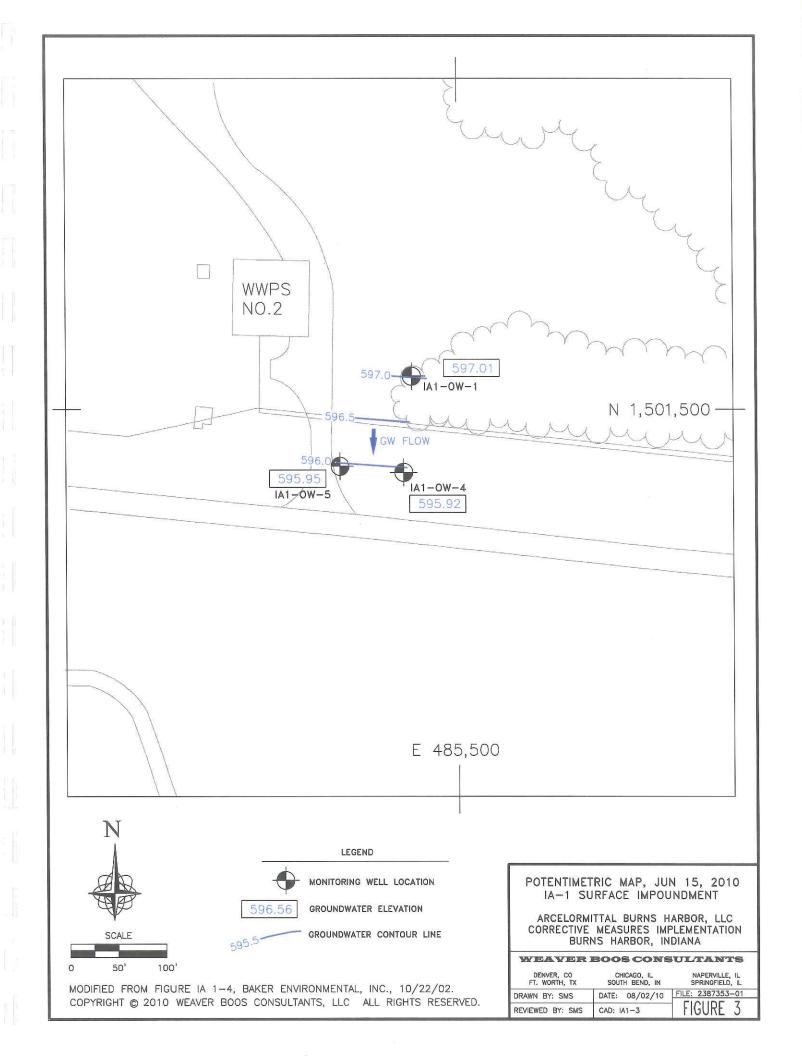
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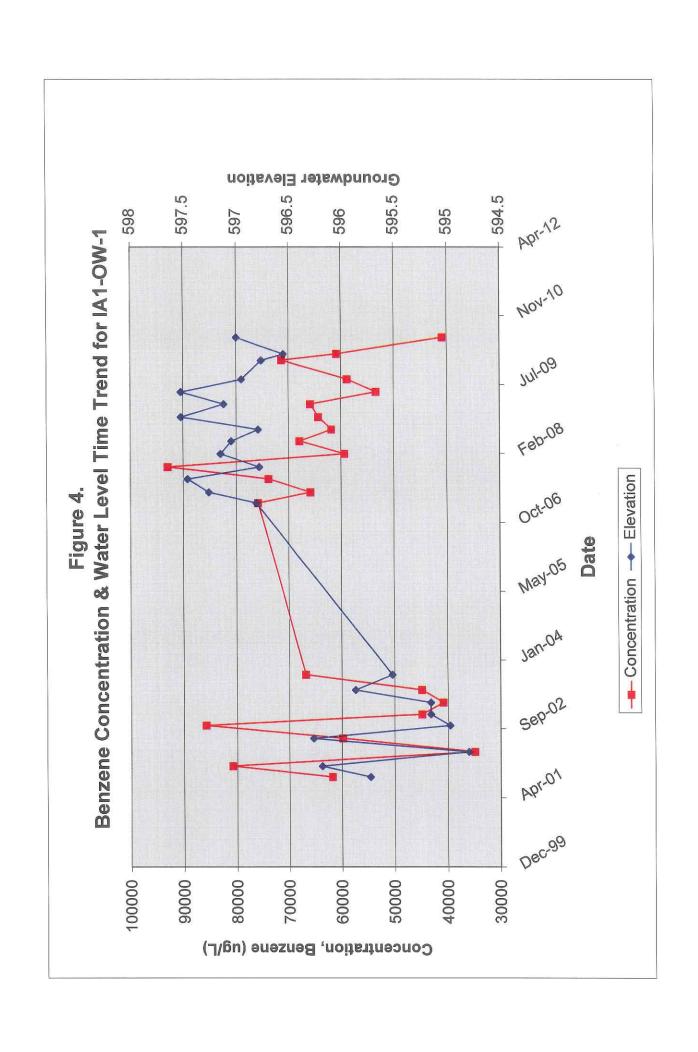
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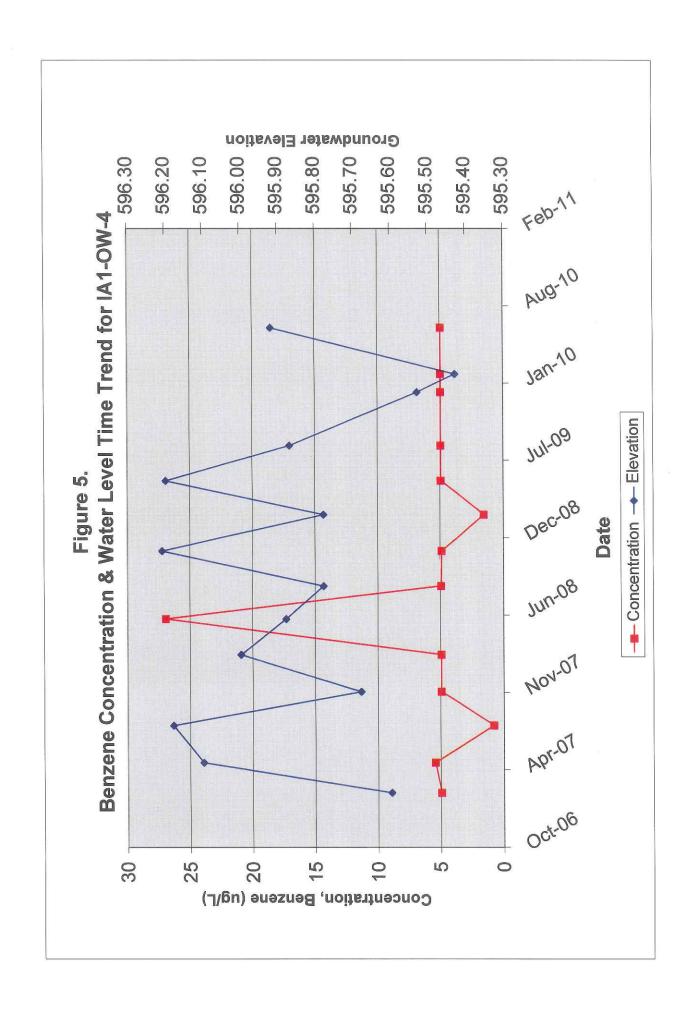












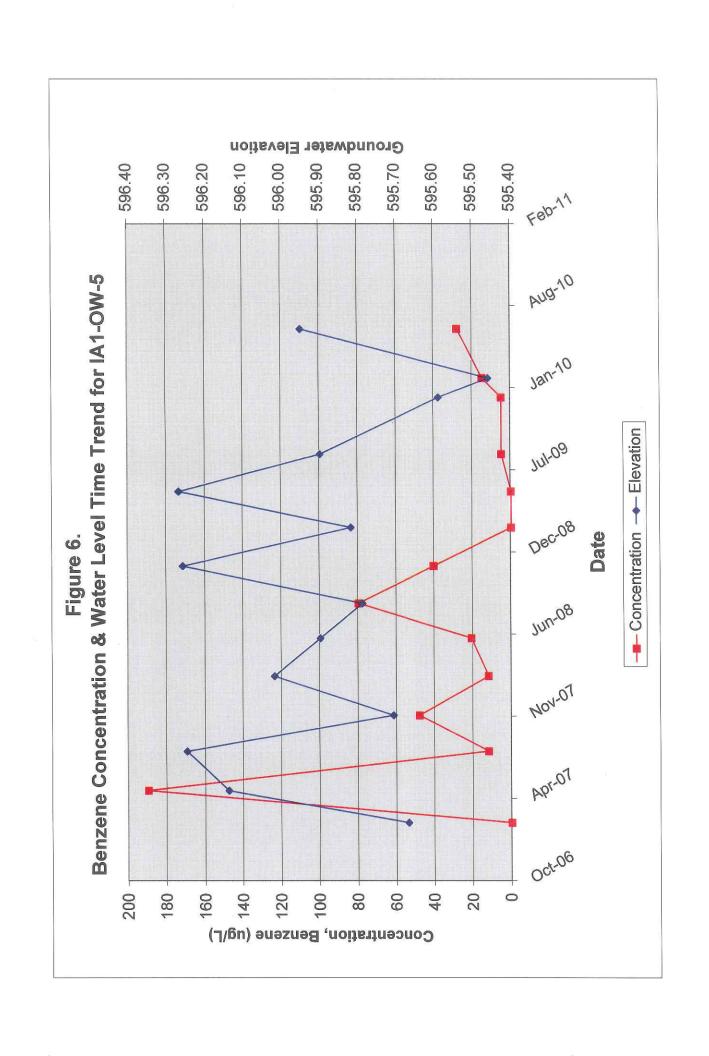


Figure 7.
Mann-Kendall Trend Results
Observation Well IA-OW-1

MONITORING WELL IA-1-0W-1 TREND TEST PERIOD: 2/28/2007 through 6/15/2010

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13	61500	-14500	-4500	-12500	-31500	2000	-6500	-500	-3000	-4500	8000	2500	-10000	
12	71500	-4500	5500	-2500	-21500	12000	3500	9500	7000	5500	18000	12500		
=	59000	-17000	-7000	-15000	-34000	-500	-9000	-3000	-5500	-7000	5500			
10	53500	-22500	-12500	-20500	-39500	-6000	-14500	-8500	-11000	-12500				
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Date	2/12/2007	8/21/2007	11/15/2007	2/20/2008	5/22/2008	8/15/2008	11/14/2008	2/16/2009	5/15/2009	8/14/2009	12/30/2009	2/15/2010	6/15/2010	0102/01/0
Location	OW-1	0.11	OW-1	OW-1	OW-1	OWL	OW 1	OW-1	OW-1	OW-1	OW-1	OW-1	OW-1	1-40
Parameter	Denzene	Denzene	Denzene	Benzene	Benzene	Donzone	Denzene	Denzene	Benzene	Denzene	Benzene	Denzene	Denzene	Delizene

99

24

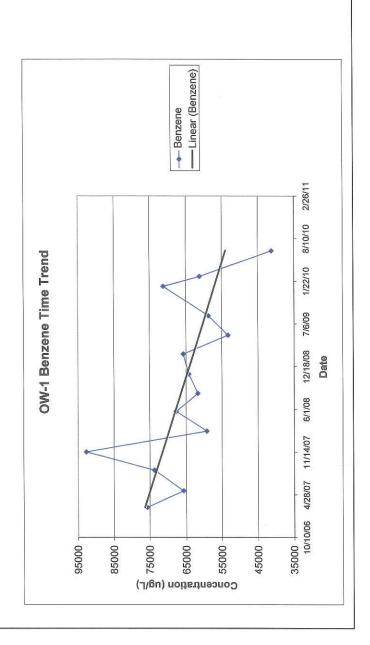


Figure 8. Mann-Kendall Trend Results Observation Well IA-OW-4

MONITORING WELL IA-1-OW-4 TREND TEST PERIOD: 2/28/2007 through 6/15/2010

Parameter	Location	Date	Result	Units										-					1		
Benzene	OW-4	7/28/2007	2.5	ne/I.	time prd.	1	2	co	4	2	9				10	11	12		14		
Benzene	OW-4	2/17/2007	8	T/on		2.5	5.5	0.85	2.5	2.5	27	2.5			2.5	2.5	2.5	2.5	- 1	No. + No -	<u>.</u>
Benzene	0 W-4	8/21/2007	0.85	T/on			3	-1.65	0	0	24.5				0	0	0	0	0	2	
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Benzene	-WO	2/20/2008	2.5	no/I.					1.65	1.65	26.15					1.65		1.65	2	1 0	
Benzene	0.W-4	5/22/2008	7.7	no/I.						0	24.5							0	0	_	
Benzene	-WO	8/15/2008	25	T/on							24.5							0	0	-	
Benzene	OW-4	11/14/2008	4.95	no/I.														-24.5	-25	60	
Benzene	OW-4	2/16/2009	16	no/I														0	0	-	55614
Benzene	OW-4	5/15/2009	2.5	T/ou	Mann Kendall Statistic	S	5						2				-2.45	-2.45	-5	9 (
Benzene	-WO	8/14/2009	2.5	no/L	Standard Normal Z Statistic Z =		-0.278											6.0	-	0	W_00
Benzene	0 W-4	12/30/2009	2.5	lon.	Large Sample Probability F		0.390									0	0	0	0	0 (
Benzene	- MO	2/15/2010	2.5	no/L	Trend Direction	n = Dov	ward										0	0	0	0 (
Denzene	0.W-A	0102/51/9	5 6	1/011	Trend Prohability (%)	= (%	61.0											0	0	0 (
DOIRON			i	b			ő.												0		
Note: For mor	utoring well O	W-4, values equ	tal to 1/2 o	of the repo	Note: For monitoring well OW-4, values equal to 1/2 of the reporting limit (2.5 ug/L) are substituted	l for non-c	letect values	for non-detect values of <5.0 ug/L	ئے											25 30	

Note: For monitoring well OW-4, values equal to 1/2 of the reporting limit (2.5 ug/L) are substituted for non-detect values of <5.0 ug/L.

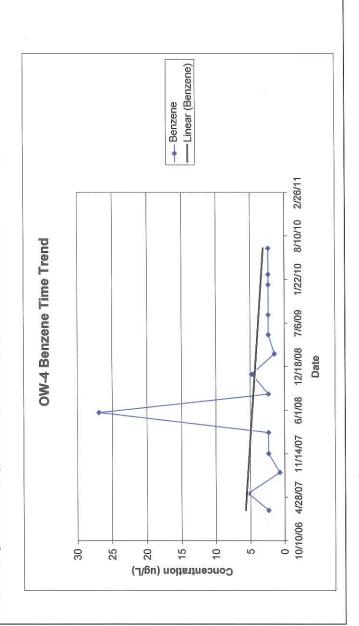


Figure 9. Mann-Kendall Trend Results Observation Well IA-OW-5

MONITORING WELL IA-1-0W-5	F PERIOD: 2/28/2007 through 6/15/2010
DRING	ES
JUNIT	REND

Parameter	Lacation	Date	Result	Units																	
Penzana	OW. 5	7/08/2007	2.5	no/I.	time prd	-	2	n	4	5	9	7	90	6	10	Ξ	12	13	14		
Denzene	5 MO	2007/21/2	190	1 / 5	Concen	2.5	190	12	48	12	21	80	40.5	47		2.5	2.5	11.9	26.5 N	No. +	No-
Benzene	2 110	9/11/2007	2 2	1/90	concern.	2	187.5	9.5	45.5	9.5	18.5	77.5	38	44.5			0	9.4	24	11	0
Benzene	5 MO	11/15/2007	75	1/50			1	-178	-142	-178	-169	-110	.149.5	-143	-176 -1	(1)	.187.5	-178.1	-164	0	12
Benzene	5 MO	1002/01/11	2 4	T'en					36	0	6	89	28.5	35			-9.5	-0.1	15	7	n
Benzene	0 W - C	5/20/2008	3 5	J/Sn						-36	-27	32	-7.5	-			-45.5	-36.1	-22	-	6
Benzene	? × × × ×	9/12/2009	17	ug/L							6	89	28.5	35			-9.5	-0.1	15	9	С
Benzene	5 MO	11/14/2000	00 4 04	1/911								59	19.5	26			-18.5	-9.1	9	4	4
Benzene	CW-5	0002/31/2	£0.5	T/An									-39.5	-33			-77.5	-68.1	-54	0	1
Denzene	2.00	5/15/2009	} =	ug/L	Monn Kendall Stat	istic S =	-15							6.5	26.5	-38	-38	-28.6	-14	_	Ŋ
Denzene	0 W 5	9/13/2009	2,0	J Sn	Standard Normal 7 Sta	tietic 7.=	-0 724										-44.5	-35.1	-21	0	'n
Benzene	2 7 7 7	0002/41/8	2.0	T/Gm	I aros Samule Prohability P = 0.235	hility P =	0.235										-11.5	-2.1	13	-	3
Benzene	2,110	2/15/2010	0 11	J Gn	Trend Di	rection = Dov	vnward										0	9.4	24	2	0
Bellzelle	5 MO	0102/21/2	25.5	1/911	Trand Brohability (%)	ity (%) =	5 92											9.4	24	2	0
реплепе	- M-C	0102/61/0	20.0	T/Sn	TOBOUT DITOUT	(a) (a)	1												14.6	_	0
Note: For mor	O Ilean anitotic	W-5 values eq	ual to 1/2 o	f the reno	Note: For monitoring well OW, 5, values e_0 and $to 1/2$ of the reporting limit $(2.5 \text{ no} I.)$ are substituted for non-detect values of $<>0.0 \text{ ug/L}$	fituted for non	-detect valu	es of <5.0 us	g/L.											36	51

Note: For monitoring well OW-5, values equal to 1/2 of the reporting limit (2.5 ug/L) are substituted for non-detect values of <5.0 ug/L.

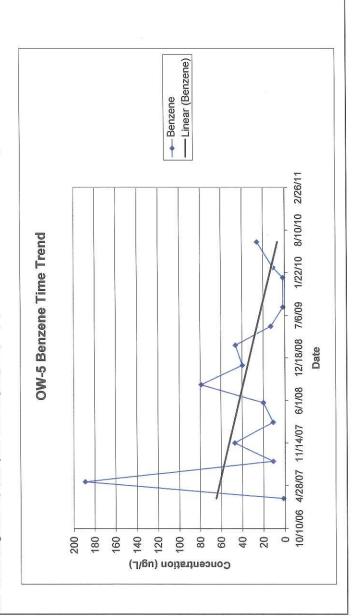




Table 1 Summary of Groundwater Elevation Data IA-1 Wastewater Pump Station No. 2 Surface Impoundment

ArcelorMittal Burns Harbor, LLC 250 West U.S. Highway 12 Burns Harbor, IN 46304-9745

Well Indentification	Top of PVC Pipe Elevation (feet)	Date Measured	Depth to Groundwater (feet)	Groundwater Elevation (feet)
IA1-OW-1	615.59	2/15/2010	19.03	596.56
IA1-OW-1	615.59	6/15/2010	18.58	597.01
IA1-OW-4	613.12	2/15/2010	17.69	595.43
IA1-OW-4	613.12	6/15/2010	17.20	595.92
IA1-OW-5	613.03	2/15/2010	17.57	595.46
IA1-OW-5	613.03	6/15/2010	17.08	595.95

Table 2

Summary of Groundwater Monitoring Well Data IA-1 Wastewater Pump Station No. 2 Surface Impoundment

ArcelorMittal Burns Harbor, LLC 250 West U.S. Highway 12 Burns Harbor, IN 46304-9745

Well and			Site Specific		Site Specific
Sample	Sample Date	Benzene	Screening Level	Toluene	Screening Level
I.D.	Seemap to see of	(ug/L)	(ug/L)	(ug/L)	(ug/L)
IA1-OW-1	9/18/2001	62,000) E /	52,000	, , , , , , , , , , , , , , , , , , ,
IA1-OW-1-2	12/6/2001	81,000		51,000	
IA1-OW-1-3	3/19/2002	35,000		24,000	
IA1-OW-1-4	6/26/2002	60,000		49,000	
IA1-OW-1-5	9/26/2002	86,000		63,000	
IA1-OW-1-6	12/17/2002	45,000			
IA1-OW-1-7	3/12/2003	41,000			
IA1-OW-1-8	6/12/2003	45,000			
IA1-OW-1-9	9/30/2003	67,000		39,000	
IA1-OW-1	2/28/2007	76,000		74,000	
IA1-OW-1	5/17/2007	66,000		65,000	
IA1-OW-1	8/21/2007	74,000	52	71,000	20,000
IA1-OW-1	11/15/2007	93,000		86,000	
IA1-OW-1	2/20/2008	59,500*		66,500*	
IA1-OW-1	5/22/2008	68,000*		68,000*	
IA1-OW-1	8/15/2008	62,000*		65,500*	
IA1-OW-1	11/14/2008	64,500*		60,500*	
IA1-OW-1	2/16/2009	66,000*			
IA1-OW-1	5/15/2009	53,500*			
IA1-OW-1	8/14/2009	59,000*			
IA1-OW-1	12/30/2009	71,500*			
IA1-OW-1	2/15/2010	61,500*			
IA1-OW-1	6/15/2010	41,500*		**************************************	
IA1-OW-4	2/28/2007	<5.0		< 5.0	
IA1-OW-4	5/17/2007	5.5		<5.0	
IA1-OW-4	8/21/2007	0.85		<5.0	
IA1-OW-4	11/16/2007	<5.0		<5.0	
IA1-OW-4	2/20/2008	<5.0*		<5.0*	
IA1-OW-4	5/22/2008	27*		16*	
IA1-OW-4	8/15/2008	<5.0*	50	<5.0*	20.000
IA1-OW-4	11/14/2008	4.95*	52	2.1*	20,000
IA1-OW-4	2/16/2009	1.6*			
IA1-OW-4	5/15/2009	<5.0			
IA1-OW-4	8/14/2009	<5.0			
IA1-OW-4	12/30/2009	<5.0			
IA1-OW-4	2/15/2010	<5.0*			
IA1-OW-4	6/15/2010	<5.0*]		
IA1-OW-5	2/28/2007	< 5.0		< 5.0	
IA1-OW-5	5/17/2007	190		33	
IA1-OW-5	8/21/2007	12		1.2	
IA1-OW-5	11/16/2007	48]	130	1
IA1-OW-5	2/20/2008	12*		8.05*]
IA1-OW-5	5/22/2008	21*		22.5*	1
IA1-OW-5	8/15/2008	80*	52	68.5*	20.000
IA1-OW-5	11/14/2008	40.5*] 32	485.5*	20,000
IA1-OW-5	2/16/2009	47*			
IA1-OW-5	5/15/2009	14*			
IA1-OW-5	8/14/2009	<5.0			
IA1-OW-5	12/30/2009	<5.0			
IA1-OW-5	2/15/2010	11.9*]
IA1-OW-5	6/15/2010	26.5*			

62000 - Bold value greater than Site Specific Screening Level

^{--- -} Sample not analyzed for this compound.

^{*} analytical results are an average of the sample and duplicate

APPENDIX A

Sampling Field Forms

CONSULTANTS, LLC

4085 Meghan Beeler Court, South Bend, IN 46628

FIELD SURVEY REPORT WATER SAMPLING

File No.: 1156-351-01
Facility: ArcelorMittal Burns Harbor, LLC

Address: 250 W. U.S. HWY 12, Burns Harbor,

Project Name: RCRA CMI

Date: 2/15/2010

Sample I.D.: <u>IA</u>	1-OW-1 Sample/Do	uplicateSan	nple Source: Monito	ring Well
Type of Sample: Groui	ndwater Surface	Water Leachate	Other:	
		le poly bailer le poly bailer		_ Dedicated (Y / N) _ Dedicated (Y / N)
en e	<u>P</u>	URGING INFORM	ATION	
Purge Date 2/15/2010	Sta	art Purge <u>11:25 AM</u>	End Purge	11:35 AM
Water Volume in Casing (ga 2-inch well has 0.163 gallons/foot	allons)	0.97 V	olume purged (gallons	s) <u>2.92</u>
		MEASUREMEN	TS	
Well Diameter	2.0 (inches)			
Stick up	25.5 (inches)			
Water Level	19.03 (feet)			Minimum
Total Depth	25.01 (feet)			
Height of Water Col.	5.98 (feet)			
Note: Gently purge thr sample.	ee casing volumes, th	nen	WELL REC	
		Very Poor	Poor Fair Modera	te Good Very Good
		SAMPLE INFORMA	ATION	
Sampling Date: 2/15/	2010			
Sampling Time: 11:38				
Sample Appearance and C	Odor: Clear	ALL PROPERTY OF THE PROPERTY O		
Weather Conditions: No	precipitation, 30°,	5-10mph southwest w	inds	
Comments:				
	4 - 4 - 4 - 4 - 4 - 4	austraus and a state of the sta	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Field blank sampled @ 11:	45 AM on 2/15/10		· · · · · · · · · · · · · · · · · · ·	
Sampler Name (Print):		ANNERS OF THE STATE OF THE STAT	ture:	

CONSULTANTS, LLC

4085 Meghan Beeler Court, South Bend, IN 46628

FIELD SURVEY REPORT WATER SAMPLING

File No.: 1156-351-01

Facility: ArcelorMittal Burns Harbor, LLC

Address: 250 W. U.S. HWY 12, Burns Harbor, II

Project Name: RCRA CMI

Date: 2/15/2010

Sample I.D.:I	IA1-OW-4 Sai	mple/Duplicate		Sample Source:	Monitor	ng Well
Type of Sample: Gro	oundwater	Surface Water	Leachate	Other:		
		isposable poly b isposable poly b				Dedicated (Y / N) Dedicated (Y / N)
		PURGI	NG INFOR	MATION	Hillion and fill the think the transfer of the	Market
Purge Date 2/15/201	0	Start Purge	11:04 AM	End	Purge	11:14 AM
Water Volume in Casing (2-inch well has 0.163 gallons/fo		1.14		Volume purged	d (gallons)	3.43
		ME	ASUREMI	ENTS	//////////////////////////////////////	
Well Diameter Stick up Water Level Total Depth Height of Water Col.	2.5 (i 17.69 (f 24.71 (f	nches) nches below gra eet) eet) eet)	de)			
Gently nurge i	three casing vol	umae than			. ~ ~ ~ 1	
Note: Gently purge t sample.	illiee casilig voi	uities, tileti		WEL	L RECH. circle one	
	inee casing voi	umes, uen	Very Poc	VVEL r Poor Fair N	(circle one)
	Till ee casing voi		Very Poo	r Poor Fair N	(circle one)
sample.	5/2010			r Poor Fair N	(circle one)
sample. Sampling Date: 2/1				r Poor Fair N	(circle one)
Sample. Sampling Date: 2/1 Sampling Time: 11: Sample Appearance and	5/2010 114 AM Odor: T <u>u</u>	SAMP	LE INFOR	r Poor Fair N	(circle one)
Sampling Date: 2/1 Sampling Time: 11:	5/2010 114 AM Odor: T <u>u</u>	SAMP	LE INFOR	r Poor Fair N	(circle one)
Sample. Sampling Date: 2/1 Sampling Time: 11: Sample Appearance and	5/2010 114 AM Odor: T <u>u</u>	SAMP	LE INFOR	r Poor Fair N	(circle one)
Sample. Sampling Date: 2/1 Sampling Time: 11: Sample Appearance and Weather Conditions: No	5/2010 114 AM Odor: T <u>u</u>	SAMP	LE INFOR	r Poor Fair N	(circle one)
Sample. Sampling Date: 2/1 Sampling Time: 11: Sample Appearance and Weather Conditions: No	5/2010 114 AM Odor: T <u>u</u>	SAMP	LE INFOR	r Poor Fair N	(circle one)
Sample. Sampling Date: 2/1 Sampling Time: 11: Sample Appearance and Weather Conditions: No	5/2010 114 AM Odor: T <u>u</u>	SAMP	LE INFOR	r Poor Fair N	(circle one)
Sample. Sampling Date: 2/1 Sampling Time: 11: Sample Appearance and Weather Conditions: No	5/2010 114 AM Odor: T <u>u</u>	SAMP	LE INFOR	r Poor Fair N	(circle one)

CONSULTANTS, LLC

4085 Meghan Beeler Court, South Bend, IN 46628

FIELD SURVEY REPORT WATER SAMPLING

File No.: 1156-351-01

Facility: ArcelorMittal Burns Harbor, LLC

Address: 250 W. U.S. HWY 12, Burns Harbor,

Project Name: RCRA CMI

Date: 2/15/2010

Sample I.D.:	IA1-OW-5	Sample/Duplicate_	Sample Source:	Monitoring Well	Additional three additional distribution of the second seco
Type of Sample: G	roundwater	Surface Water Lead	chate Other:		-
Equipment Used:	Purging Sampling	Disposable poly bailer Disposable poly bailer	W.C	Dedicated (`Dedicated (`	
		PURGING INF	ORMATION		
Purge Date 2/15/2 (010	Start Purge 10:35	AM End	Purge 10:45 AM	;
Water Volume in Casing 2-inch well has 0.163 gallons.	g (gallons)	1.38	Out of the second secon	d (gallons) 4.15	
		MEASURI	EMENTS		nii aan aa daa ka k
Well Diameter	2.0	(inches)			
Stick up	4.0	_ (inches below grade)			
Water Level	17.57	(feet)			
Total Depth	26.05	(feet)			
Height of Water Col.	8.48	(feet)			
Note: Gently purg sample.	e three casing	volumes, then	WE	LL RECHARGE (circle one)	
		Ver	y Poor Poor Fair	Moderate Good	Very Good
		SAMPLE INF	ORMATION		
Sampling Date: 2	/15/2010				
	0:47 AM	(A)	Ore the second of the second o	NATIONAL PROFESSIONAL CONTRACTOR DE CONTRACT	
Sample Appearance ar	nd Odor:	Slightly Turbid		· · · · · · · · · · · · · · · · · · ·	
		ition, 30°, 5-10mph southv	vest winds	NETERONO DE TENENTE PER PER PER PER PER PER PER PER PER PE	OKUSEWA CEURA A DA LA
Comments:					
Trip blank prepared by	lab dated 2/°	15/10 @ 0900	Name		THE STATE OF THE S
					·
		A MARKET THE TOTAL THE TOT	=======================================		NOT THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OWN
					TREETWOOD TO THE TREETWOOD THE TREETWOOD TO THE TREETWOOD TO THE TREETWOOD TO THE TREETWOOD THE TREETWOOD TO THE TREETWOOD THE TREETWOOD THE TREETWOOD TO THE TREETWOOD THE TREETWO

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CONSULTANTS, LLC

4085 Meghan Beeler Court, South Bend, IN 46628

FIELD SURVEY REPORT WATER SAMPLING

File No.: 1156-351-01
Facility: ArcelorMittal Burns Harbor, LLC

Address: 250 W. U.S. HWY 12, Burns Harbor,

Project Name: RCRA CMI

Date: 6/15/2010

Sample l.D.: <u>IA1-OW-1</u> \$	Sample/Duplicate	Sample So	urce: Monitori	ng Well
Type of Sample: Groundwater	Surface Water	Leachate Othe	r:	
Equipment Used: Purging Sampling	Disposable poly bail			Dedicated (Y / N) Dedicated (Y / N)
	PURGING	INFORMATION		kiti 1860 1860 1860 1860 1860 1860 1860 1860
Purge Date <u>6/15/2010</u>	Start Purge_	10:55 AM	End Purge	11:05 AM
Water Volume in Casing (gallons) 2-inch well has 0.163 gallons/foot	1.05	Volume	purged (gallons)	3.14
	MEAS	UREMENTS		
Well Diameter 2.0	(inches)			
Stick up 25.5	_(inches)			
Water Level 18.58	_(feet)			
Total Depth 25.01	_(feet)			
Height of Water Col. 6.43	_(feet)			
Note: Gently purge three casing sample.	volumes, then		WELL RECH	
		Very Poor Poor	Fair Moderate	Good Very Good
	SAMPLE	INFORMATION		
Sampling Date: 6/15/2010				
Sampling Time: 11:10 AM				WHATCH
Sample Appearance and Odor:	Clear	- CHIMAL MARKET CHIMAL		1888, 184
Weather Conditions: No precipita		outhwest winds	LOUGH MAINTENANCE CONTRACTOR OF THE CONTRACTOR O	
Comments:				
Field blank sampled @ 11:20 AM or	6/15/10		110000	
The second secon				
		A STATE OF THE STA		
Sampler Name (Print): Jodi L. E.			Lake to	

CONSULTANTS, LLC

4085 Meghan Beeler Court, South Bend, IN 46628

FIELD SURVEY REPORT WATER SAMPLING

File No.: 1156-351-01

Facility: ArcelorMittal Burns Harbor, LLC

Address: 250 W. U.S. HWY 12, Burns Harbor, If

Project Name: RCRA CMI

WATI	ER SAN	IPLING	Date: 6/15/2010				
Sample I.D.: _IA	1-0W-4	Sample/Duplicate	Sample Source: Moni	toring Well			
Type of Sample: Grou	ndwater	Surface Water Leach	ate Other:				
	rging mpling	Disposable poly bailer Disposable poly bailer		Dedicated (Y / N) Dedicated (Y / N)			
		PURGING INF	ORMATION	, A. C.			
Purge Date <u>6/15/2010</u>		Start Purge 10:35 A	M End Purge	10:45 AM			
Water Volume in Casing (gallons) 2-inch well has 0.163 gallons/foot		1.22	Volume purged (gallo	ns)3.67			
	2888 · · · · · · · · · · · · · · · · · ·	MEASURE	MENTS				
Well Diameter Stick up Water Level Total Depth Height of Water Col.	2.0 2.5 17.20 24.71 7.51	_(inches) _(inches below grade) _(feet) _(feet) _(feet)					
Note: Gently purge three casing volumes, then sample.			WELL RE	one)			
		Very I	Poor Poor Fair Moderat	te Good Very Good			
		SAMPLE INFO	ORMATION				
Sampling Date: 6/15	2010						
Sampling Time: 10:5	O AM	Manager Committee Committe					
Sample Appearance and		Turbid with odor	THE CONTRACTOR OF THE CONTRACT				
Weather Conditions: No	precipita	tion, 85°, 5-10mph southwe	est winds				
Comments:							
				- OWNERS - MOZZAY			
			Assistant are contained as the contained				
Sampler Name (Print):	Jodi L. E.	Slough	Signature:	et Soft			

CONSULTANTS, LLC

4085 Meghan Beeler Court, South Bend, IN 46628

FIELD SURVEY REPORT WATER SAMPLING

File No.: 1156-351-01

Facility: ArcelorMittal Burns Harbor, LLC

Address: 250 W. U.S. HWY 12, Burns Harbor,

Project Name: RCRA CMI

6/15/2010

Date:

Sample I.D.: <u>IA1-OW-5 Sample/Duplicate</u> Sample Sou					Monito	ring Well			
Type of Sample:	Groundwater	Surface Water	Leachate	Other:					
Equipment Used:	Purging	Disposable poly bai	ler			Dedicated (Y / N)			
Sampling		Disposable poly bailer				Dedicated (Y / N)			
	######################################	SOLSSON HARROWS HARROWS SHARE STATE OF THE SOLSSON FRANCISCO S			20 P	***************************************			
		PURGIN	G INFORN	IATION					
Purge Date <u>6/15/2010</u>		Start Purge	10:15 AM	End I	Purge ₋	10:20 AM			
Water Volume in Casing (gallons) 2-inch well has 0.163 gallons/foot		1.46	V	olume purged	(gallons)	4.39	0.00		
er gelik (i gelik filologia en	istaalas-isti iyostiikki aleesta lamisuutsiaanissi liiteliitii	MEA	SUREME						
Well Diameter	2.0	(inches)					3		
Stick up	4.0	(inches below grade	e)						
Water Level	17.08	_ (feet)							
Total Depth	26.05	_(feet)							
Height of Water Col.	8.97	_(feet)							
Note: Gently purge three casing volumes, then sample.			WELL RECHARGE (circle one)						
			Very Poor	Poor Fair	Moderate	Good Very Goo	d		
SAMPLE INFORMATION									
Sampling Date:	6/15/2010								
Sampling Time:	10:30 AM				Discommentation recommends				
Sample Appearance a	ind Odor:	Slightly Turbid							
Weather Conditions:	No precipita	ition, 85°, 5-10mph s	southwest w	inds			NOTE THE PARTY OF		
Comments:									
Trip blank prepared by	/ lab dated 6/	15/2010	······································						
		НЕ СО ПЕТЕТ В ПЕТЕТ В ПЕТЕТ В ПОТЕТЕТ В		ния в приняти на приня	***************************************		MANNA MARKATA		
						- The Company of the			
	man man in han 2000 NOPH (I De al Complete House) which complete House)		managar maga da ang managar maga da ang maga da an	nemer en en el fel de l'Allacid II ma biblioche d'Allacid II con a ma l'en					
Sampler Name (Print)	: Jodi L. E	. Slough	Sign	ature:	hot at	e Soyl			

APPENDIX B

Analytical Results



February 26, 2010

Teri Kirk Arcelor Mittal Steel USA - Burns Harbor 250 W US Highway 12 Burns Harbor, IN 46304-9745

RE: IA-1 Sampling/Burns Harbor

Dear Teri Kirk:

Microbac Laboratories, Inc. received 8 samples on 2/15/2010 12:35:00 PM for the analyses presented in the following report.

Work Order No.: ME1002500

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,

Microbac Laboratories, Inc.

(arey Machaela

Carey A. Gadzala Project Manager

Enclosures



Date:

Friday, February 26, 2010

WORK ORDER SAMPLE SUMMARY

CLIENT: Arcelor Mittal USA, Inc.

Project: IA-1 Sampling/Burns Harbor

Lab Order: ME1002500

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
ME1002500-01A	IA1-OW-1 Sample		2/15/2010 11:38:00 AM	2/15/2010
ME1002500-02A	IA1-OW-1 Duplicate		2/15/2010 11:38:00 AM	2/15/2010
ME1002500-03A	IA1-OW-4 Sample		2/15/2010 11:14:00 AM	2/15/2010
ME1002500-04A	IA1-OW-4 Duplicate		2/15/2010 11:14:00 AM	2/15/2010
ME1002500-05A	IA1-OW-5 Sample		2/15/2010 10:47:00 AM	2/15/2010
ME1002500-06A	IA1-OW-5 Duplicate		2/15/2010 10:47:00 AM	2/15/2010
ME1002500-07A	Trip Blank		2/15/2010 9:00:00 AM	2/15/2010
ME1002500-08A	Field Blank		2/15/2010 11:45:00 AM	2/15/2010



Date:

Friday, February 26, 2010

Client:

Arcelor Mittal Steel USA - Burns Harbor

Client Project:

IA-1 Sampling/Burns Harbor

Client Sample ID:

IA1-OW-1 Sample

Work Order / ID:

ME1002500-01A

Sample Description:

Collection Date:

02/15/10 11:38

Sample Matrix:

Aqueous

Date Received:

02/15/10 12:35

Analyses

ST

Result

Qual

RL

Units

DF

Analyzed

BTEX	Method:	SW8260	В	Prep Da	ate/Time:		Analyst: JLN
Benzene		Α	61000	2500	µg/L	500	02/25/10 01:41
Surr: 4-Bromofluorobenzene		S	94.4	76.9-116	%REC	500	02/25/10 01:41



Date:

Friday, February 26, 2010

Client:

Arcelor Mittal Steel USA - Burns Harbor

Client Project:

IA-1 Sampling/Burns Harbor

Client Sample ID:

IA1-OW-1 Duplicate

Work Order / ID:

ME1002500-02A

Sample Description:

Collection Date:

02/15/10 11:38

Sample Matrix:

Aqueous

Date Received:

02/15/10 12:35

Analyses

ST

Result

Qual

RL

Units DF

Analyzed

Method: SW8260B **BTEX** Prep Date/Time: Analyst: JLN Α 62000 2500 500 02/25/10 02:16 Benzene µg/L S 76.9-116 %REC Surr: 4-Bromofluorobenzene 94.5 500 02/25/10 02:16



Date:

Friday, February 26, 2010

Client:

Arcelor Mittal Steel USA - Burns Harbor

Client Project:

IA-1 Sampling/Burns Harbor

Client Sample ID:

IA1-OW-4 Sample

Work Order / ID:

ME1002500-03A

Sample Description:

Collection Date:

02/15/10 11:14

02/15/10 12:35

Sample Matrix:

Aqueous

Date Received:

Analyses

ST

Result

Qual

RL

Units DF Analyzed

BTEX	Method:	SW8260	В		Prep D	ate/Time:		Analyst: JLN
Benzene		A		ND	5.0	μg/L	1	02/24/10 15:27
Surr: 4-Bromofluorobenzene		S	92.2		76.9-116	%REC	1	02/24/10 15:27



Date:

Friday, February 26, 2010

Client:

Arcelor Mittal Steel USA - Burns Harbor

Client Project:

IA-1 Sampling/Burns Harbor

Client Sample ID:

IA1-OW-4 Duplicate

Work Order / ID:

ME1002500-04A

Sample Description:

Collection Date:

02/15/10 11:14

Sample Matrix:

Aqueous

Date Received:

02/15/10 12:35

Analyses

ST

Result

Qual

RL

Units DF

Analyzed

BTEX	Method:	SW8260	В		Prep D	ate/Time:		Analyst: JLN
Benzene		A		ND	5.0	μg/L	1	02/24/10 16:01
Surr: 4-Bromofluorobenzene		S	92.7		76.9-116	%REC	1	02/24/10 16:01



Date:

Friday, February 26, 2010

Client:

Arcelor Mittal Steel USA - Burns Harbor

Client Project:

IA-1 Sampling/Burns Harbor

Client Sample ID:

IA1-OW-5 Sample

Work Order / ID:

ME1002500-05A

Sample Description:

Collection Date:

02/15/10 10:47

Sample Matrix:

Aqueous

Date Received:

02/15/10 12:35

Analyses

ST

RL

Qual

Prep Date/Time:

Units

DF Analyzed

BTEX Benzene Method: SW8260B

Α 15 S 99.1

Result

5.0

µg/L

Analyst: JLN 02/25/10 19:27

Surr: 4-Bromofluorobenzene

76.9-116

%REC

02/25/10 19:27



Date:

Friday, February 26, 2010

Client:

Arcelor Mittal Steel USA - Burns Harbor

Client Project:

IA-1 Sampling/Burns Harbor

Client Sample ID:

IA1-OW-5 Duplicate

Work Order / ID:

ME1002500-06A

Sample Description:

Collection Date:

02/15/10 10:47

Sample Matrix:

Aqueous

Date Received:

02/15/10 12:35

Analyses

ST

RL Result

Qual

Units DF

Analyzed

BTEX	Method: SW	/8260	В	Prep	Date	/Time:		Analyst: JLN
Benzene		Α	8.8	5.0	b	µg/L	1	02/25/10 19:59
Surr: 4-Bromofluorobenzene		S	98.3	76.9-116		%REC	1	02/25/10 19:59



Date:

Friday, February 26, 2010

Client:

Arcelor Mittal Steel USA - Burns Harbor

Client Project:

IA-1 Sampling/Burns Harbor

Client Sample ID:

Trip Blank

Work Order / ID:

ME1002500-07A

Collection Date:

02/15/10 09:00

Sample Description: Sample Matrix:

Aqueous

Date Received:

02/15/10 12:35

Analyses

ST

RL Result

Qual

DF Units

Analyzed

Method: SW8260B Prep Date/Time: Analyst: JLN BTEX ND 5.0 02/24/10 18:12 Benzene µg/L S 92.6 %REC 02/24/10 18:12 Surr: 4-Bromofluorobenzene 76.9-116



Date:

Friday, February 26, 2010

Client:

Arcelor Mittal Steel USA - Burns Harbor

Client Project:

IA-1 Sampling/Burns Harbor

Client Sample ID:

Field Blank

Work Order / ID:

ME1002500-08A

Sample Description:

Collection Date:

02/15/10 11:45

Sample Matrix:

Aqueous

Date Received:

02/15/10 12:35

Analyses

ST

Result

Qual

RL

Units DF

Analyzed

E	BTEX	Method:	SW8260	В		Prep D	ate/Time:		Analyst: JLN
	Benzene		Α		ND	5.0	μg/L	1	02/24/10 20:30
	Surr: 4-Bromofluorobenzene		S	92.0		76.9-116	%REC	1	02/24/10 20:30



FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

NA = Not Analyzed N/A = Not Applicable

mg/L = Milligrams per Liter (ppm) ug/L = Micrograms per Liter (ppb) cfu = Colony Forming Unit
mg/Kg = Milligrams per Kilogram (ppm) ug/Kg = Micrograms per Kilogram (ppb) ng/L = Nanograms per Liter (ppt)

U = Undetected

J = Analyte concentration detected between RL and MDL (Metals / Organics)

j = Analyte concentration detected betweeen 1/2 PQL and PQL (for TIC analytes only)

B = Detected in the associated Method Blank at a concentration above the routine PQL/RL

b = Detected in the associated Method Blank at a concentration above the Method Detection Limit but less than the routine PQL/RL

D = Surrogate recoveries are not calculated due to sample dilution

ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if listed)

E = Value above quantitation range

H = Analyte was prepared and/or analyzed outside of the analytical method holding time

I = Matrix Interference

R = RPD outside accepted recovery limits

S = Spike recovery outside recovery limits

Surr = Surrogate

DF = Dilution Factor RL = Reporting Limit ST = Sample Type MDL = Method Detection Limit

SAMPLE TYPES

A = Analyte

I = Internal Standard

S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)

OC SAMPLE IDENTIFICATIONS

MBLK	=	Method Blank	ICSA	=	Interference Check Standard "A"	OPR	=	Ongoing Precision and
DUP	==	Method Duplicate	ICSAB	=:	Interference Check Standard "AB"			Recovery Standard
LCS	i=:	Laboratory Control Sample	LCSD	-	Laboratory Control Sample Duplicate			
MS		Matrix Spike	MSD	=	Matrix Spike Duplicate			
ICB	=	Initial Calibration Blank	CCB	=	Continuing Calibration Blank			
ICV	=	Initial Calibration Verification	CCV	=	Continuing Calibration Verification			
PDS	=	Post Digestion Spike	SD	=	Serial Dilution			

CERTIFICATIONS

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

- Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)
- Illinois Department of Public Health for the microbiological analysis of drinking water (registry #1755266)
- Indiana DEM approved support laboratory for solid waste and wastewater analyses
- Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)
- Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)
- Kentucky DEP for the chemical analysis of drinking water (lab #90147)
- Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)
- New York SDH for the chemical analysis of air and emissions (lab #11909)
- North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations (certificate #597)
- Tennessee DEC for the chemical analysis of drinking water (lab #04017)
- Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)

MICROBAC LOCATIONS, SERVICE CENTERS (SC) AND SATELLITE OFFICES (Sat)

Kentucky Division - Louisville, KY Ohio Valley Division - Marietta, OH Baltimore Division - Baltimore, MD Kentucky Division (Sat) - Evansville, IN Pittsburgh Division - Warrendale, PA Camp Hill Division - Camp Hill, PA Camp Hill Division (SC) - Pittston, PA Kentucky Division (Sat) - Lexington, KY Richmond Division - Richmond, VA Chicagoland Division - Merrillville, IN Kentucky Division (Sat) - Paducah, KY South Carolina Division - New Ellenton, SC Knoxville Division - Maryville, TN South Jersey Division - Laurel Springs, NJ Chicagoland Division (SC) - Indianapolis, IN Southern California Division - Corona, CA Massachusetts Division - Worchester, MA Southern Headquarters - Poquoson, VA Microbac Corporate Office - Pittsburgh, PA Southern Testing Division - Wilson, NC Erie Division - Erie, PA Fayetteville Division - Fayetteville, NC Microbac NY - Cortland Office - Cortland, NY Southern Testing Division (Sat) - Greensboro, NC Hauser Division - Boulder, CO Microbac NY - Waverly Office - Waverly, NY Venice Division - Venice, FL



COOLER INSPECTION

Client Name Arcelor Mittal Steel USA - Burn	Date / Time Received: 2/15/2010 12:35:00 PM
Work Order Number ME1002500	Received by: DEB
Checklist completed by DEB 2/15/2010 1:59:55 PM	Reviewed by CAG 2/15/2010 4:13:38 PM
Acceptance of the control of the con	The second secon
Carrier name: <u>Client Delivere</u>	<u>ed</u>
After-Hour Arrival? Yes	□ No ✔
Shipping container/cooler in good condition?	✓ No Not Present
Custody seals intact on shippping container/cooler? Yes	□ No □ Not Present ✔
Custody seals intact on sample bottles?	□ No □ Not Present ✓
Chain of custody present? Yes	✓ No □
Chain of custody included sufficient client identification? Yes	✓ No □
Chain of custody included sufficient sample collector information? Yes	✓ No □
Chain of custody included a sample description? Yes	✓ No □
Chain of custody agrees with sample labels?	✓ No □
Chain of custody identified the appropriate matrix? Yes	✓ No □
Chain of custody included date of collection? Yes	✓ No □
Chain of custody included time of collection?	✓ No □
Chain of custody identified the appropriate number of containers? Yes	✓ No □
Samples in proper container/bottle? Yes	✓ No □
Sample containers intact? Yes	✓ No □
Sufficient sample volume for indicated test?	✓ No □
All samples received within holding time?	No 🗆
If samples are preserved, are the preservatives identified?	No □
	No □
If No, adjusted by?	Date/Time
Chain of custody included the requested analyses? Yes	No 🗆
	No 🗆
Samples received on ice? Yes	
Container/Temp Blank temperatures Cooler	
1	
VOA vials for aqueous samples have zero headspace? No VOA vials submitted	d ☐ Yes ✔ No ☐
ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NO	TIFICATION.
General Comments:	
Sample ID Client Sample ID	Comments
ME1002500-01A IA1-OW-1 Sample	- Comments
ME1002500-01A IA1-OW-1 Sample ME1002500-02A IA1-OW-1 Duplicate	
ME1002500-02A IA1-OW-1 Buplicate ME1002500-03A IA1-OW-4 Sample	
ME1002500-03A IA1-OW-4 Sample ME1002500-04A IA1-OW-4 Duplicate	
ME1002500-04A IA1-OW-4 Bupilcate ME1002500-05A IA1-OW-5 Sample	
ME1002500-05A IA1-OW-5 Sample ME1002500-06A IA1-OW-5 Duplicate	
ME1002500-06A	
ME1002500-07A	
IVIE TOOLOGG-OOA IT ISIG DIGHT	

Friday, February 26, 2010

Date:

icrobac submitted to:	d to:	Fax. E	Merriilville, II Tel: 219-769- Fax: 219-769	46410 8378 -1664		Indianapolis, IN 46278 Tel: 317-872-1375 Fex: 317-672-1379	IN 46278 375 1379			Nu seri	Number 948	94826 on back	Number 94826
250 West Husy 12		Project	l lel	A B	Molin Hare		Turnaround Time	urmarot (7 worki	Turnaround Time (7 working days)		(\$. 88 88	Re (s) Results Only	Report Type
Terri Kirk	Wa	Comp	pliance D	387- Monitoring?	1 -	1-02	[] RUSH* (notify lab)	(notify la	(9		[] Level III		[] Level III CLP-like
		(3)	(1)Agency/Program	rogram	A Long State of the state of th	7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(need	(needed by)	100	(1600		
mpled by (PRINT) Jodi Sloud	[]Fax (fax #)	1	Sampler	er Signature) land	Class	Le-mail (address)	(ddress)	Sampler Phone	Phone	2	(c)/h	71.3447
* Matrix Types: Soll/Solid (S), Sludge, Oll, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify) Preservative Types: (1) HNO3. (2) H2SO4. (3) HCI. (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved	, Wipe, Dr HCI, (4)	rinking NaOH,	Water ((5) Zing	(DW), Groundy c Acetate, (6) I	Groundwater (GW), Sutate, (6) Methanol, (7) S	Surface Water) Sodium Bisuif	(SW), Waste Water (WW), Other (specify) fate, (8) Sodium Thiosulfate, (9) Hexane, (te Water	r (WW), (Other (sp. (9) Hex	ecify) ane, (U) U	npreserve	50 S. S. S.
Client Sample ID	"xintelli denii	Composite	- beneati-	Date Collected	Dected time Collected	No. of Containers Types Types Types Types		ग्यान्य					For Lab Use Only
OW-1 Sample	3	-		21/21/2	11:38	3 3	7	T.				The second of the second	4 70
-	610	-		0/15/10	188:11	3	7		10 mm	100			60
ow-4 Samole	Sw 1	_		0115/110	11:14	3	7	1					23
7	8 03 7			0/15/10		3	3	1					100
4	SW 7	5 N	3.	alsho	10:47	3	7 T	1	5)- 6	2)		Control of the contro	So
Ow-5 Duplicate	Sul	_	100	2)15/10	N		7						90
Polank	3	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		21510	0060	3	2	\ \	100		A should be	Letters con page	67
Slank	3	+		0/12/10	S	60		1	72				- 80
		+	Ш							+		+	
Possible Hazard Identification [] Hazardous Comments	Non-Hazardous	Rei	rdous [] F	Radioactive, ned By Caldnature		Sample Disposition Date/Time	osition	Dispor	Dispose as appropriate [Received By (signature)	oropriate (signatu	() Return		Archive Date/Time
	,	厘	Hefinquishe	The By (sight	Sure) De C	2/15/10 Date/Time	1.35	Rece	Received By (signature)	(signatu	re)		Date/Time
	Tolor		Relinquishe	ned By (signature)		Date/Time		Rec	wed for	Lab By	Received for Lab By (signature)	(0	Date/Time



June 25, 2010

Arcelor Mittal USA, Inc. 250 W US Highway 12 Burns Harbor, IN 46304-9745

Work Order No.: 10F0658

Re: IAW

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 8 sample(s) on 6/15/2010 12:40:00PM for the analyses presented in the following report as Work Order 10F0658.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

Sincerely,

Microbac Laboratories, Inc.

Carry Hackpala

Carey Gadzala Project Manager



WORK ORDER SAMPLE SUMMARY

Date:

Friday, June 25, 2010

Client:

Arcelor Mittal USA, Inc.

Project:

IAW

Lab Order: 10F0658

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
10F0658-01	IA1-OW-1 Sample		06/15/2010 11:10	6/15/2010 12:40:00PM
10F0658-02	IA1-OW-1 Duplicate		06/15/2010 11:10	6/15/2010 12:40:00PM
10F0658-03	IA1-OW-4 Sample		06/15/2010 10:50	6/15/2010 12:40:00PM
10F0658-04	IA1-OW-4 Duplicate		06/15/2010 10:50	6/15/2010 12:40:00PM
10F0658-05	IA1-OW-5 Sample		06/15/2010 10:30	6/15/2010 12:40:00PM
10F0658-06	IA1-OW-5 Duplicate		06/15/2010 10:30	6/15/2010 12:40:00PM
10F0658-07	Field Blank		06/15/2010 11:20	6/15/2010 12:40:00PM
10F0658-08	Trip Blank		06/15/2010 00:00	6/15/2010 12:40:00PM



Date:

Friday, June 25, 2010

Client:

Arcelor Mittal USA, Inc.

Client Project: Client Sample ID: IAW

IA1-OW-1 Sample

Sampled:

Work Order/ID:

10F0658-01

06/15/2010 11:10

					Received	i:	06/15/2010 12:4
queous							
	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SW-846 8	260B		An	alyst:JLN
					P	rep Date/	Time: 06/19/2010 00:00
	A	41000	25	00	µg/L	500	06/22/2010 11:38
	Aqueous	AT	AT Result	AT Result RL Method: SW-846 8	AT Result RL Qual Method: SW-846 8260B	AT Result RL Qual Units Method: SW-846 8260B	AT Result RL Qual Units DF Method: SW-846 8260B An Prep Date/



Date:

Friday, June 25, 2010

Client:

Arcelor Mittal USA, Inc.

Client Project: Client Sample ID: IAW

IA1-OW-1 Duplicate

Sampled:

10F0658-02

Work Order/ID:

06/15/2010 11:10

Received:

06/15/2010 12:40

Prep Date/Time: 06/19/2010 00:00

Sample Description: Matrix:

BTEX

Aqueous

Analyses

RL Units DF Qual Analyzed

Method: SW-846 8260B Analyst: BR

µg/L 1000 Benzene 40000 5000 06/19/2010 18:22

AT Result



Date:

Friday, June 25, 2010

Client:

Arcelor Mittal USA, Inc.

Client Project: Client Sample ID: IAW

Sampled:

10F0658-03

IA1-OW-4 Sample

06/15/2010 10:50

Sample Description:

Received:

Work Order/ID:

06/15/2010 12:40

watrix:	Aqueous					
Analyses		AT	Result	RL	Qual	Units

Analyses	AT	Result		RL	Qual	Units	DF	Analyzed
3			Method: SW	/-846 8	260B		An	alyst:BR
BTEX						P	rep Date/	Time: 06/19/2010 00:00
Benzene	Α		ND	5	5.0	µg/L	1	06/19/2010 18:55



Date:

Friday, June 25, 2010

Client:

Arcelor Mittal USA, Inc.

Client Project: Client Sample ID: IAW

IA1-OW-4 Duplicate

Work Order/ID:

10F0658-04

Sampled:

06/15/2010 10:50

Received:

06/15/2010 12:40

Sample Description: Matrix:

Aqueous

RL Units DF AT Result Qual Analyzed Analyses

Method: SW-846 8260B Analyst: BR Prep Date/Time: 06/18/2010 00:00 BTEX Α µg/L Benzene ND 5.0 06/18/2010 17:19



Date:

Friday, June 25, 2010

Client:

Arcelor Mittal USA, Inc.

Client Project: Client Sample ID: IAW

IA1-OW-5 Sample

Work Order/ID: Sampled:

10F0658-05

06/15/2010 10:30

					Received	1:	06/15/2010 12:40
Aqueous							
	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SW-846 8	3260B		An	alyst: BR
					P	rep Date/	Time: 06/18/2010 00:00
	A	28		5.0	μg/L	1	06/18/2010 17:48
	Aqueous	AT	AT Result	AT Result RL Method: SW-846 8	AT Result RL Qual Method: SW-846 8260B	Aqueous AT Result RL Qual Units Method: SW-846 8260B	AT Result RL Qual Units DF Method: SW-846 8260B An Prep Date/



Date:

Friday, June 25, 2010

Client:

BTEX

Arcelor Mittal USA, Inc.

Client Project: Client Sample ID:

Sample Description:

IAW

17-17

Work Order/ID:

10F0658-06

IA1-OW-5 Duplicate

Sampled:

06/15/2010 10:30

Received:

06/15/2010 12:40

 Matrix:
 Aqueous

 Analyses
 AT Result
 RL Qual Units
 DF Analyzed

 Method: SW-846 8260B
 Analyst: BR

25

Prep Date/Time: 06/18/2010 00:00 5.0 μg/L 1 06/18/2010 18:17



Date:

Friday, June 25, 2010

Client:

Arcelor Mittal USA, Inc.

Client Project: Client Sample ID: IAW

Field Blank

Work Order/ID:

10F0658-07

Sampled:

06/15/2010 11:20

Received:

06/15/2010 12:40

Sample Description: Matrix:

Aqueous

Analyses	AT	Result		RL	Qual	Units	DF	Analyzed
			Method: SW	V-846 826	0B		Ana	alyst:BR
BTEX						Р	rep Date/1	Time: 06/18/2010 00:00
Benzene	Α		ND	5.0		µg/L	1	06/18/2010 18:46



Date:

Friday, June 25, 2010

Client:

Arcelor Mittal USA, Inc.

Client Project:

IAW

Client Sample ID:

Trip Blank

Work Order/ID:

10F0658-08

Sampled:

06/15/2010 0:00

Received:

06/15/2010 12:40

Sample Description:

Matrix:

Aqueous

Analyses	AT	Result	RL	Qual	Units	DF	Analyzed
0			Method: SW-846 82	60B		Ana	alyst: BR
BTEX					Р	rep Date/1	ime:06/18/2010 00:00
Benzene	A	25	5	0	µg/L	1	06/18/2010 19:14



FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

NA = Not Analyzed
mg/L = Milligrams per Liter (ppm)
mg/Kg = Milligrams per Kilogram (ppm)

U = Undetected

J = Analyte concentration detected between RL and MDL (Metals / Organics)

B = Detected in the associated method Blank at a concentration above the routine PQL/RL

D = Dilution performed on sample

ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)

E = Value above quantitation range

H = Analyte was prepared and/or analyzed outside of the analytical method holding time

I = Matrix Interference

R = RPD outside accepted recovery limits S = Spike recovery outside recovery limits

Surr = Surrogate
DF = Dilution Factor

ANALYTE TYPES

A,B = Target Analyte
I = Internal Standard
M = Summation Analyte

S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)

QC SAMPLE IDENTIFICATIONS

MBLK	=	Method Blank	ICSA	=	Interference Check Standard "A"
DUP	=	Method Duplicate	ICSAB	=	Interference Check Standard "AB"
LCS	=	Laboratory Control Sample	LCSD	=	Laboratory Control Sample Duplicate
BS	=:	Method Blank Spike	BSD	=	Method Blank Spike Duplicate
MS	=	Matrix Spike	MSD	=	Matrix Spike Duplicate
ICB	=	Initial Calibration Blank	CCB	=	Continuing Calibration Blank
ICV	=	Initial Calibration Verification	CCV	=	Continuing Calibration Verification
PDS	=	Post Digestion Spike	SD	=	Serial Dilution
OPR	=	Ongoing Precision and Recovery S	Standard		

CERTIFICATIONS

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

Illinois EPA for the analysis wastewater and solid waste in accordance with the requirements of the National Environmental Laboratory Accreditation Program [NELAP] (accreditation #100435)

Illinois Department of Public Health for the microbiological analysis of drinking water (registry #1755266)

Indiana DEM approved support laboratory for solid waste and wastewater analyses

Indiana SDH for the chemical analysis of drinking water (lab #C-45-03)

Indiana SDH for the microbiological analysis of drinking water (lab #M-45-8)

Kentucky DEP for the chemical analysis of drinking water (lab #90147)

Kentucky EPPC for the analysis of samples applicable to the Underground Storage Tank program (lab #75)

New York SDH for the chemical analysis of air and emissions (lab #11909)

North Carolina DENR for the environmental analysis for NPDES effluent, surface water, groundwater, and pretreatment regulations(certificate #597)

Tennessee DEC for the chemical analysis of drinking water (lab #04017)

Wisconsin DNR for the chemical analysis of wastewater and solid waste (lab #998036710)



COOLER INSPECTION Date: Friday, June 25, 2010 Date/Time Received: 06/15/2010 12:40 Client Name: Arcelor Mittal USA, Inc. Work Order Number: Received by: 10F0658 Dan Petreikis Reviewed by: 6/15/2010 CAG Checklist completed by: Dan Petreikis 6/15/2010 1:09:00PM Carrier Name: Client Delivered Cooler ID: Default Cooler Container/Temp Blank Temperature: 4.00°C After-Hour Arrival? Yes No Shipping container/cooler in good condition? Yes No Not Present Custody seals intact on shipping container/cooler? Yes No Not Present Custody seals intact? Yes No Not Present COC present? Yes No COC included sufficient client identification? Yes No COC included sufficient sample collector information? Yes No COC included a sample description? Yes No COC agrees with sample labels? Yes No COC identified the appropriate matrix? Yes No COC included date of collection? Yes No COC included time of collection? Yes No COC identified the appropriate number of containers? Yes No Samples in proper container/bottle? Yes No Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes No All samples received within holding time? Yes No If the samples are preserved, are the preservatives identified? Yes No COC included the requested analyses? Yes No If No, adjusted by? COC signed when relinquished and received? Yes No Samples received on ice? Yes No Samples properly preserved? Yes No Voa vials for aqueous samples have zero headspace? Yes No VOA vials submitted Cooler Comments: ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION. Sample ID Client Sample ID Comments 10F0658-01 IA1-OW-1 Sample 10F0658-02 IA1-OW-1 Duplicate 10F0658-03 IA1-OW-4 Sample 10F0658-04 IA1-OW-4 Duplicate 10F0658-05 IA1-OW-5 Sample IA1-OW-5 Duplicate 10F0658-06 10F0658-07 Field Blank 10F0658-08 Trip Blank

Submitted to:

Monthly

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Chain of Custody Record Number S7134

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Bontact Tech Kirk		Complian	iliance	Monitoring?	ice Monitoring? (1) [] No	°				in the second	[] Level IV		[] Level IV CLP-like	#Ke
# Bephone # 219, 187, 4643	HACKWART .	(1)Ag	(1)Agency/Program	одгат		d	7		(needed by)		11 EDD		A CONTRACTOR OF THE CONTRACTOR	Hemesion of the Control of the Contr
F ampled by (PRINT) JOCK STOLLAN		(/)	Sample	pler Signature	Leel		7	-	S	Sampler Phone #	272	X	0885	wo jallang wood geg
[] Mail [] Telephone	 Fax (fax #)		200	VALVE VOIDE				Me mail (address)	(ssa			ALCOHOLOGICA CONTRACTOR	The second section of the section o	
* Matrix Types: Soil/Solid (S), Sludge, Oli, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (WW), Waste Water (WW), Other (specify) ** Preservative Types: (1) HNO3. (2) H2SO4. (3) HCI. (4) NaOH. (5) Zinc Acetate, (6) Methanol. (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved	Oil, Wipe, Dr (3) HCl. (4) P	inking V	Vater (5) Zinc	DW), Ground : Acetate, (6)	rr (DW), Groundwater (GW), Surface Water (SW); Waste Water (WW), Other (specify) in Acetate. (6) Methanol, (7) Sodium Bisulfate. (8) Sodium Thiosulfate, (9) Hexane, (urface V Sodium	Vatør (SW), v Bisulfate, (8)	Vaste V Sodiun	Vater (WV n Thiosul	/), Other (spe ate, (9) Hexa	soify) ne, (U) Unpre	served		(Conditional State)
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Possible Hazard Identification [] Hazardous	[] Non-Hazardous	zardous		Radioactive		Sample	Sample Disposition	<u>[]</u>	spose as	Dispose as appropriate	[] Return	[] Archive	9	
G gmments B B	ANANAN-WAYARAK (MATANAN-MATANAN MATANAN MATANA	Relinqui	iquishe /	shed By (srg) dlure		Date/Time	10 1246		Received	Received By (signature)	(e)	ă	Date/Time	
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of	600	Relinquit	quish	shed By (signature)		Date/Time			Secerived (Received for Lab By (signature)	signature)		Date/Time	1340
Sample temperature upon receipt in degrees C =	ij		TOTAL PRESIDENCE	Annual of the second se	mental section of the second section of the second	THE PERSON NAMED OF THE PE	THE PROPERTY OF THE PROPERTY O					Notice and Associated Streets	Communication of the Communica	-
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